



AUTHORIZATION TO OPERATE AND MAINTAIN
UNDER THE LAWS OF THE
STATE OF DELAWARE

1. Pursuant to the provisions of 7 Del. C., 6003

Allen Harim Foods, LLC
PO Box 277
Harbeson, DE 19951

is herein authorized to operate and maintain an on-site wastewater treatment and disposal system to service:

Allen Harim Harbeson Poultry Processing Facility

Located (tax map #: 2-35-30.00-0097.00):

18752 Harbeson Road, Harbeson, DE, Sussex County

To receive and treat:

process wastewater generated by poultry processing

And to dispose of:

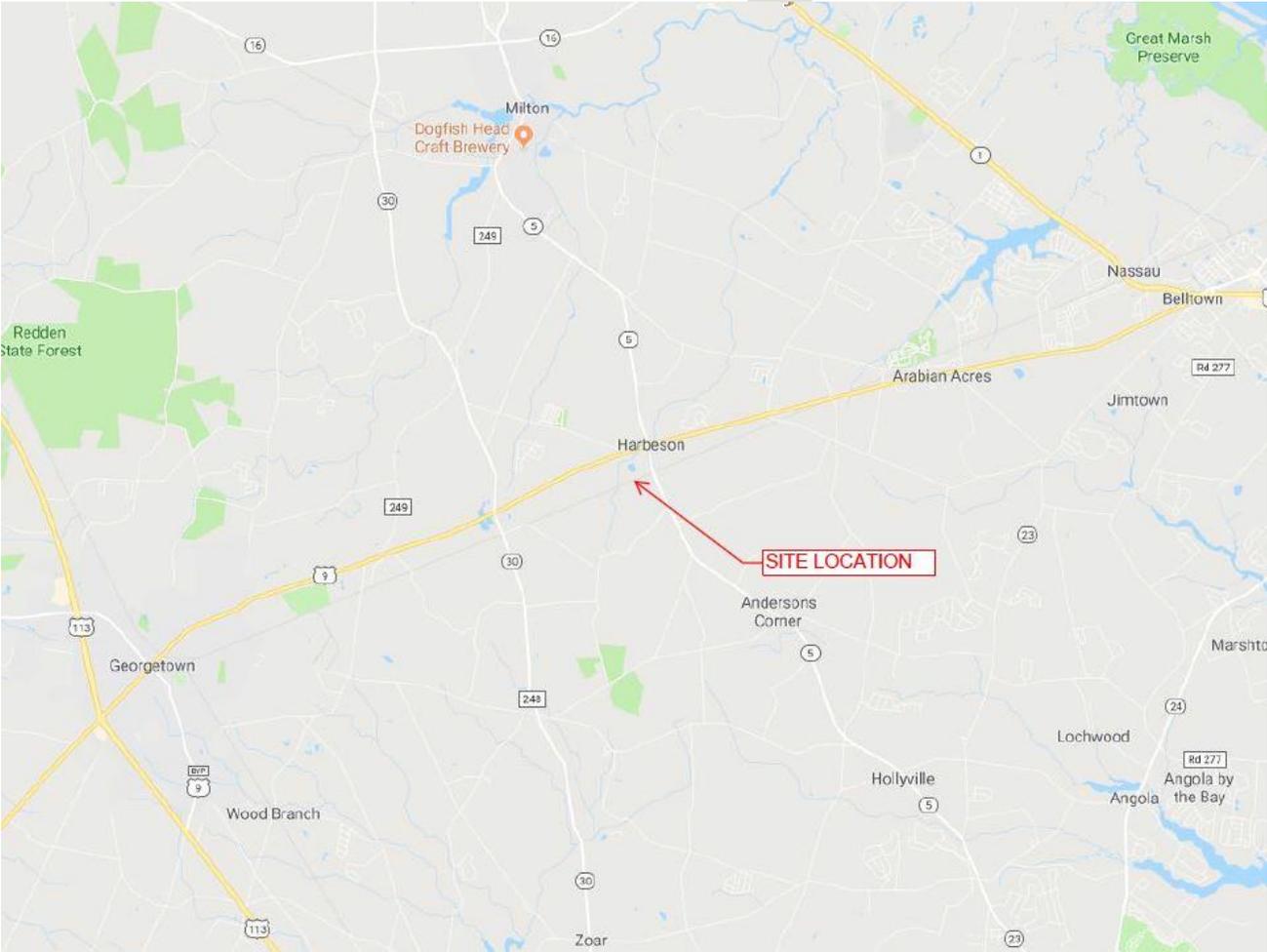
treated wastewater effluent via transfer to the Artesian Northern Sussex Regional Water Recharge Facility for proper disposal

2. **The effluent limitations, monitoring requirements and other permit conditions are set forth in Part I, II and III hereof.**

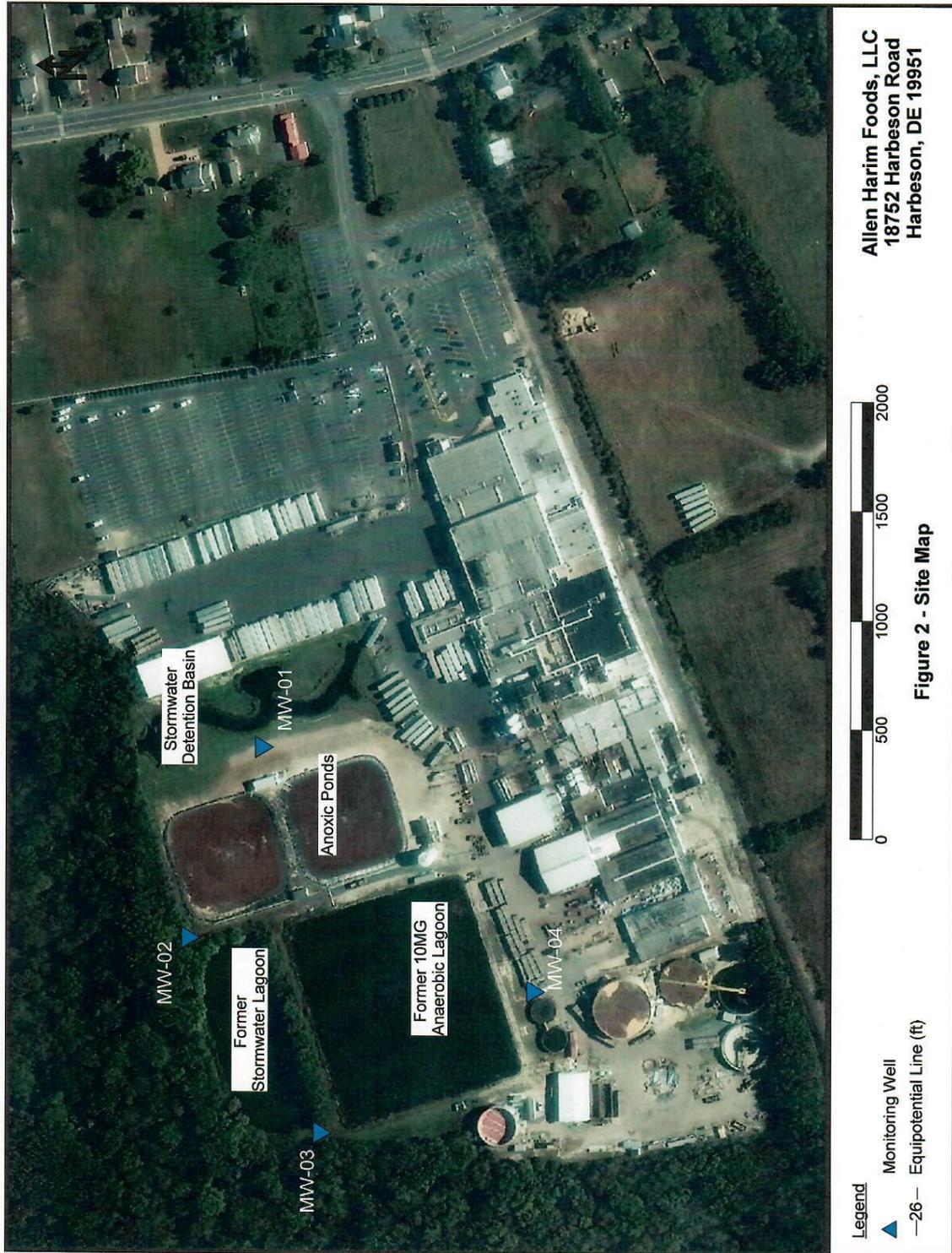
Ping Wang, Ph.D., Program Manager II
Ground Water Discharges Section
Department of Natural Resources &
Environmental Control

Date

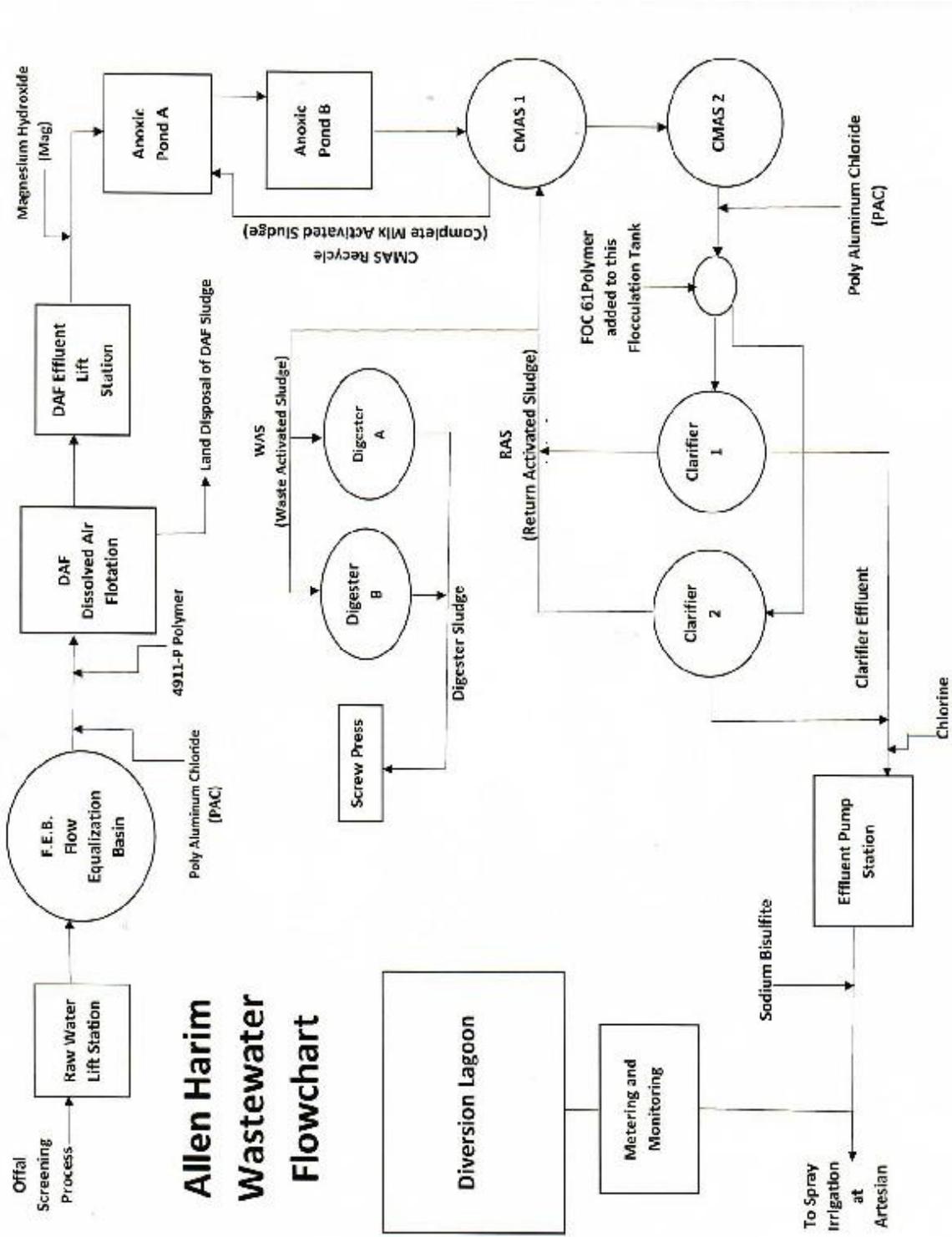
SITE LOCATION MAP



FACILITY SITE MAP



PROCESS DIAGRAM



**Allen Harim
 Wastewater
 Flowchart**

Part I

A. General Description of Discharges

The on-site wastewater treatment system shall receive and treat process waste water generated from poultry processing at the Allen Harim Harbeson Facility, deboning process wastewater from the Pinnacle Processing Facility, and hatchery processing wastewater from the Dagsboro Hatchery Facility. The average quantity of influent to the on-site wastewater treatment system shall not exceed 2 million gallons per day (gpd). The treatment system consists of primary screening, grit removal, an approximate 60,000 gallon Dissolved Air Flotation device, two 1.5 million gallon anoxic Biological Nutrient Removal basins, one 1.6 million gallon aeration cell, one 0.5 million gallon aeration cell, one 5,600 gallon Flocculation Tank, two 0.424 million gallon clarifiers and one 28,250 gallon chlorination/dechlorination contact tank. There are two 134,000 gallon aerobic digesters for sludge treatment. Diversion lagoons are incorporated into the treatment train to allow for approximately 4 million gallons of storage. After treatment the effluent is pumped via force main to the Artesian Northern Sussex Regional Water Recharge Facility (ANSRWRF) for storage in a synthetically lined lagoon and disposal via spray irrigation in accordance with State Permit No. 359288-02.

B. Influent Limitations

Beginning on the effective date and lasting through the expiration date of this permit, the permittee is authorized to receive and treat the quantity of influent specified below:

1. The average influent flow from Allen Harim Harbeson Facility shall not exceed 2 million gpd
2. The maximum influent flow from the Pinnacle Processing facility shall not exceed 40,000 gpd
3. The maximum influent flow from the Dagsboro Hatchery facility shall not exceed 40,000 gpd

C. Effluent Limitations

1. The average effluent flow from Allen Harim Harbeson Facility transferred to ANSRWRF shall not exceed 1.5 MGD averaged over a 7-day period and shall not exceed a peak daily flow of 2.0 MGD
2. BOD daily average concentration shall not exceed 10 mg/l
3. Fecal coliform concentration shall not exceed 20 col/100 ml at any time
4. Total Nitrogen (as N) concentration daily average shall not exceed 30 mg/l
5. Total Nitrogen (as N) concentration daily maximum shall not exceed 45 mg/l
6. TSS daily average concentration shall not exceed 10 mg/l
7. Turbidity concentration shall not exceed 5 TU at any time
8. The pH of the effluent shall not be less than 5.5 standard units nor greater than 9.0 standard units at any time
9. The total residual chlorine concentration shall not be less than 1.0 mg/L nor more than 4.0 mg/L at any time

10. The Chloride concentration of the effluent shall not exceed 250 mg/L on an average annual basis
11. The Sodium concentration of the effluent shall not exceed 210 mg/L on an average annual basis

D. Monitoring Requirements

During the period beginning on the effective date and lasting through the expiration date of this permit, the permittee is authorized to discharge to the system. Such discharge shall be monitored by the permittee as specified below:

For samples required to be taken 'monthly' and/or 'twice per month', the samples for each monitoring location (i.e. influent, effluent, well, lysimeter, etc.) shall be taken a minimum of 14 days apart.

1. Influent and effluent samples

Influent to the wastewater treatment system and effluent from the wastewater treatment system prior to discharge shall be sampled for the following parameters:

| Parameter | Unit Measurement | Monitoring Frequency | Sample Type | |
|-----------------------------|------------------|----------------------|-------------|-----------|
| | | | Influent | Effluent |
| Flow | Gallons Per Day | Continuous | Recorded | Recorded |
| BOD ₅ | mg/L | 2 x Month | Grab | Composite |
| TSS | mg/L | 2 x Month | Grab | Composite |
| Total Dissolved Solids | mg/L | Quarterly | NA | Grab |
| Fecal Coliform | Col/100 ml | Quarterly | NA | Grab |
| Total Nitrogen | mg/L | 1 x Week | Grab | Composite |
| Ammonia Nitrogen | mg/L | Monthly | Grab | Composite |
| Nitrate/Nitrite as Nitrogen | mg/L | Monthly | Grab | Composite |
| pH | S.U. | 3 x per week | Grab | Composite |
| Total Phosphorus | mg/L | Monthly | Grab | Composite |
| Chloride | mg/L | Quarterly | Grab | Composite |
| Turbidity | NTU | Continuous | N/A | Recorded |
| Total Residual Chlorine | mg/L | Continuous | N/A | Recorded |
| Potassium | mg/L | Quarterly | N/A | Composite |
| Sodium | mg/L | Quarterly | N/A | Composite |

2. Monitoring Wells

The following monitoring wells:

| Local ID | DNREC ID |
|----------|----------|
| MW-01 | 260091 |
| MW-02 | 260092 |
| MW-03 | 260093 |
| MW-04 | 260094 |

shall be sampled by the permittee for the following parameters:

| Parameter | Unit Measurement | Monitoring Frequency | Sample Type |
|----------------------------|---------------------|----------------------|-------------|
| pH | S.U. | Quarterly | Field Test |
| Temperature | °F | Quarterly | Field Test |
| Specific Conductance | µS/cm | Quarterly | Field Test |
| Dissolved Oxygen | mg/L | Quarterly | Field Test |
| Depth to Water Table | Hundredth of a foot | Quarterly | Field Test |
| Ammonia Nitrogen | mg/L | Quarterly | Grab |
| Nitrate + Nitrite Nitrogen | mg/L | Quarterly | Grab |
| Total Nitrogen | mg/L | Quarterly | Grab |
| Total Coliforms | Col/100 ml | Quarterly | Grab |
| Fecal Coliform | Col/100 ml | Quarterly | Grab |
| Total Phosphorus | mg/L | Quarterly | Grab |
| Sodium | mg/L | Quarterly | Grab |
| Chloride | mg/L | Quarterly | Grab |
| Total Dissolved Solids | mg/L | Quarterly | Grab |

Samples taken in compliance with the monitoring requirements specified above shall be taken at each monitoring well and observation well in accordance with procedures approved by the Department and listed in the State of Delaware Field Manual for Groundwater Sampling (Custer, 1988).

E. Monitoring Reporting

In accordance with Section 6.9 of the Regulations Governing the Design, Installation and Operation of On-Site Wastewater Treatment and Disposal Systems (Regulations), the permittee shall submit to the Department an annual report summarizing operations, management, administration and maintenance of the facility for the calendar year. The annual report must be submitted to the Department on or before February 28th of each year.

Monitoring results obtained during the previous one (1) month/quarter shall be summarized for each month/quarter and reported on an approved On-Site Effluent/Groundwater Monitoring Report Form postmarked no later than the 28th day of the month following the completed reporting period. Signed copies of these, and all other reports required herein shall be submitted to the Department at the following address:

Delaware Department of Natural Resources and Environmental Control
Ground Water Discharges Section
89 Kings Highway
Dover, DE 19901

Telephone: (302) 739-9948
Fax: (302) 739-7764

The Department may provide written requirements for the permittee to submit monitoring data electronically. Upon notification from the Department, the permittee shall transition (as directed) to the Department's electronic database system. The submission may need to be electronically signed.

- F. Monitoring results reported as less than the detectible limit should be reported with the less than symbol "<" before the detection limit. The full detection limit value must be utilized in any necessary calculations. The less than symbol must be carried through the calculation. The resulting value must include any appropriate less than or greater than symbol resulting from the calculation.

G. Representative Samples

Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge.

H. Test Procedures

Test procedures for the analysis of pollutants shall conform to the applicable test procedures identified in 40 C.F. R. Part 136 or the most recently adopted copy of Standard Methods unless otherwise specified in this permit.

I. Quality Assurance Practices

The Permittee is required to show the validity of all monitoring data by requiring its laboratory to adhere to quality assurance practices in accordance with Section 6.8.2.4 of the Regulations.

J. Recording of Results

- i. For each measurement or sample taken pursuant to the requirements of this permit, the Permittee shall record the following information:
- ii. The exact place, date and time of sampling and/or measurement;
- iii. The person(s) who performed the sampling and/or measurement;
- iv. The date(s) the analyses were performed and the time the analyses were begun;
- v. The person(s) who performed the analyses; and
- vi. The results of each analysis.

K. Records Retention

All records and information resulting from the monitoring activities required by this permit including all records of analyses performed and calibration and maintenance of instrumentation and recording from continuous monitoring instrumentation shall be retained for five (5) years. This period of retention shall be extended automatically during the course of any unresolved litigation regarding the regulated activity or regarding control standards applicable to the permittee, or as requested by the Department.

L. Additional Monitoring by Permittee

If the permittee monitors any pollutant at the location(s) designated herein more frequently than required by this permit, using approved analytical methods specified herein, then the results of such monitoring shall be included in the calculation and reporting of the values required in the appropriate Monitoring Report Form. Such increased frequency shall also be indicated.

M. Schedule of Compliance

- a. The Permittee shall submit the information necessary and/or complete the following requirements for proper compliant operation of the onsite wastewater treatment system:
 - i. Allen Harim shall complete lagoon cleanout and lining activities for the old (abandoned) anaerobic lagoon at the facility in accordance with a

Department approved lagoon cleanout plan to establish the lagoon as the permanent diversion option for offspec wastewater under this operations permit.

1. Allen Harim shall submit a signed and executed contract with a lagoon cleanout company by November 1, 2019.
 2. Lagoon cleanout activities shall begin as soon as practicable, but no later than by July 1, 2020.
 3. During the lagoon cleanout, the permittee shall maintain records documenting the amount of sludge removal and disposal location and report this information to the Department monthly until lagoon cleanout is complete.
 4. Lagoon cleanout shall be completed, and the lagoon synthetically lined and ready for service as soon as practicable, but no later than July 1, 2021.
- ii. Within thirty (30) days of operations permit issuance for both Allen Harim and ANSRWRF, Allen Harim will permanently seal Outfall 001 and terminate NPDES Permit DE0000299.
1. Within fifteen (15) days of operations permit issuance for both Allen Harim and ANSRWRF, Allen Harim will cease stream discharge and schedule Outfall 001 closure.

Part II

A. MANAGEMENT REQUIREMENTS

a. Facilities Operation

The permittee shall at all times maintain in good working order and operate as efficiently as possible all collection, treatment and disposal system components installed or used by the permittee to achieve compliance with the terms and conditions of this permit.

Operation of this wastewater treatment system requires a Class IV operator. The operator is responsible for operation, maintenance, and sampling of the facility. The operator shall perform site checks at a minimum of once every two weeks or as needed to adequately operate the system.

An operator log must be kept on site at all times. All records and reports shall also be kept on site at all times. This log shall, at a minimum, include the following:

- i. Time spent at the facility on any date
- ii. Details of the operation and maintenance performed on the system on any date
- iii. The volume of wastewater received and treated
- iv. A record of any deviations from the operation and maintenance manual or permit conditions
- v. A record of any deviations from the operation and maintenance manual or any condition that required effluent diversion
- vi. General daily weather conditions
- vii. A record of all actions taken to correct violations of this permit and the Department's regulations
- viii. Record of all site management activities undertaken
- ix. Record the date and volumes, and destination of biosolids removed from the system. A copy of the biosolids hauling receipts with amounts removed shall be kept on file at the site

b. Change in Discharge

Any usage authorized herein shall be consistent with the terms and conditions of this permit. Any anticipated facility expansions, production increases, or process modifications which will result in new, different, or increased discharges must be reported by submission of a written report to the Department with the following time lines:

- i. Thirty (30) days before any planned physical alteration or addition to the permitted facility or activity if that alteration or addition would result in any change in information that was submitted to the Department.
- ii. Thirty (30) days before any anticipated change which would result in noncompliance with any permit condition or the regulations.
- iii. Immediately after the permittee becomes aware of relevant facts not submitted or incorrect information submitted in a permit application or any report to the Department. Those facts or the correct information shall be submitted as soon as possible and be included as part of the report.

c. Noncompliance Notification

If, for any reason, the permittee does not comply with or will be unable to comply with any limitations or condition specified in this permit, the permittee shall contact the Ground Water Discharges Section at 739-9948, within 24 hours of noncompliance issue occurring. In the event of a spill during non-business hours, weekends or holidays, the permittee shall call the Department's 24hr Release Reporting Hotline at (800) 662-8802.

The permittee shall also provide the Ground Water Discharges Section with the following information, in writing, within five (5) days of becoming aware of such condition:

- i. A description of, and cause of noncompliance with any such limitation or condition; and
- ii. The period of noncompliance, including exact dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate and prevent recurrence of the noncomplying condition; and
- iii. Steps taken or planned to reduce or eliminate reoccurrence of the noncompliance.

d. Facilities Operation

The permittee shall at all times properly maintain and operate as efficiently as possible all structures, systems and equipment for treatment control and monitoring which are used by the permittee to achieve compliance with the terms and conditions of this permit. Proper operation and maintenance includes, but is not limited to, effective performance based on designed facility removals, adequate funding, effective management, adequate operator staffing and training, and adequate laboratory and process controls including appropriate quality assurance procedures.

e. Adverse Impact

The permittee shall take all reasonable steps to eliminate or minimize any adverse impact to waters of the State resulting from this permit, including such accelerated or additional monitoring as necessary to determine the source, nature, and extent of the impact from a noncomplying discharge. In addition, at the direction of the Department, the permittee shall submit a corrective action plan which will include a description of the proposed actions to mitigate or eliminate the source of the impact and an associated completion schedule. The plan shall be enacted as approved by the Department.

f. Removed Substances

Solids, sludge, filter backwash or other pollutants removed in the course of treatment or control of wastewater shall be disposed of in a manner such as to prevent any pollutant from entering the surface water or ground water and to comply with applicable federal or state laws and regulations.

g. Power Failures

An alternative power source, which is sufficient to operate the wastewater treatment and disposal facilities, shall be available. If such alternative power source is not available, the permittee shall halt, reduce or otherwise control production and/or all discharges upon the reduction, loss, or failure of the primary source of power to the wastewater facilities.

B. RESPONSIBILITIES

a. Reapplication for a Permit

At least 180 days prior to the expiration date of the operation permit, the permittee shall submit an application for renewal or notify the Department of the intent to cease discharging by the expiration date. The application package for systems with a design flow $\geq 100,000$ gpd, must include a five (5) year Compliance Monitoring Report (CMR) in accordance with Section 6.5.4.3 of the Regulations.

In the event that a timely and complete application has been submitted as determined by the Department, and the Department is unable, through no fault of the permittee, to issue a new permit before the expiration date of this permit, the terms and conditions of this permit are automatically continued and remain fully effective and enforceable until a decision is made on the new application.

b. Right of Entry

The permittee shall allow, at reasonable times, the Secretary of the Department of Natural Resources and Environmental Control, or his authorized representatives, upon the presentation of credentials and such other documents as may be required by law:

- i. To enter upon the permittee's premises where the on-site wastewater treatment and disposal system is located or where any records are required to be kept under the terms and conditions of this permit;
- ii. To have access to and copy any records required to be kept under the terms and conditions of this permit;
- iii. To inspect any facility, equipment, monitoring method, monitoring equipment, practice or operation permitted or required under this permit; and

- iv. To sample or monitor for the purpose of assuring permit compliance with any condition of this permit, the regulations or 7 Del C., Chapter 60.

c. Transfer of Ownership and Control

No person shall transfer a permit from one location to another or from one piece of equipment to another. No person shall transfer a permit from one person to another unless thirty days written notice is given to the Department, indicating the transfer is agreeable to both persons, and approval of such transfer is obtained in writing from the Department, and any conditions of the transfer approved by the Department are complied with by the transferor and the transferee.

The notice to the Department shall contain a written agreement between the transferor and the transferee, indicating the specific date of proposed transfer of permit coverage and acknowledging responsibilities of current and new permittees for compliance with and liability for the terms and conditions of this permit. The notice shall be signed by both the transferor and the transferee.

d. Availability of Reports

All reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Department of Natural Resources and Environmental Control. Monitoring data shall not be considered confidential. Knowingly making any false statement on any such report may result in the imposition of criminal penalties as provided for in 7 Del. C., §6013.

e. Permit Modification, Revocation and Termination

After notice and opportunity for a hearing, this permit may be modified, terminated, or revoked in whole or in part during its term for cause including, but not limited to, any of the following:

- i. Violation of any terms of conditions of this permit, the regulations, 7 Del. C., Chapter 60 or failure to pay applicable Department fees;
- ii. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts;
- iii. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge; or
- iv. If the Department finds that the health, safety or welfare of the public requires emergency action, the Department shall incorporate findings in support of such action in a written notice of emergency revocation issued to the permittee. Emergency revocation shall be effective upon receipt by the permittee. Thereafter, if requested by the permittee in writing, the Department shall provide the permittee a revocation hearing and prior

notice thereof. Such hearings shall be conducted in accordance with 7 Del. C., Chapter 60.

f. State Laws

This permit shall not be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable state law or regulation.

g. Property Rights

The issuance of this permit does not convey any property rights of either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations.

h. Severability

The provisions of this permit are severable. If any provision of this permit, or the application of any provision of this permit to any circumstances, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

PART III

A. SPECIAL CONDITIONS

a. Process Control Testing and Diversion Indicators

Wastewater that fails to meet the operating criteria as described in the Operation and Maintenance (O&M) Plan including process control testing results of > 30 mg/L for Nitrate as N and total Nitrogen (as verified by laboratory results) shall be automatically diverted into the on-site storage lagoons designated in the O&M Plan. Diversion shall occur until the total Nitrogen and Nitrate as N analytical results are < 30 mg/L. The permittee shall sample the effluent for the following diversion parameters using field tests and other Department approved methods:

| Parameter | Unit Measurement | Monitoring Frequency | Sample Type |
|-------------------|------------------|----------------------|------------------|
| | | | Effluent |
| *BOD ₅ | mg/L | 1 x Week | Grab |
| COD | mg/L | 5 x Week | Grab |
| Nitrate | mg/L | Daily | Composite & Grab |
| Total Nitrogen | mg/L | Daily | Composite & Grab |
| Dissolved Oxygen | mg/L | 5 x Week | Grab |

* After 1 year the BOD₅ testing monitoring frequency shall be 2 times per month.

- b. Connections or additions to the on-site wastewater treatment system other than those indicated on the approved plans will not be allowed without prior approval of the Department.
- c. In the event that the permittee installs new monitoring wells/observation wells, the permittee shall submit to the Department new elevation details relative to the common benchmark previously established.
- d. A valid sludge hauling contract shall be maintained for the life of the system. A copy of the waste manifest shall be made available to the Department during the annual compliance inspection or upon request. Any changes in the sludge haulers shall be reported to the Department immediately.
- e. This permit does not relieve the permittee of complying with any other applicable Federal, State or local regulations.
- f. The Department will conduct an annual compliance inspection with the facility's operator of the on-site wastewater treatment and disposal system. An inspection fee will be charged.
- g. The permittee shall furnish to the Department within a specified period of time, any information including copies of records, which may be requested by the Department to determine whether cause exists for modifying, revoking, reissuing, or terminating the permit, or to determine compliance with the permit and the Regulations.
- h. In the event the wastewater treatment facility, or a component of the facility, is proposed to be abandoned, the permittee shall submit a proposed closure and abandonment work plan with procedures on how the facility will be abandoned for review and approval by the Department. The work plan shall address remediation if monitoring data indicates impacts to the environment. Upon review and approval of the work plan and completion of all closure and abandonment actions the permittee must contact the Department for a final inspection of the site.
- i. The Permittee shall calibrate all flow meters in accordance with the Manufacturer's recommendations. Calibration shall include, but not be limited to influent, effluent, continuous online turbidity and chlorine residual monitors. The calibration documentation must be submitted to the Department.
- j. The Permittee shall operate and maintain the land treatment system in accordance with the approved Operation and Maintenance Plan (O&M). A copy of the O&M must be on site at all times. The Permittee must maintain the O&M's accuracy and applicability in accordance with both their Permit and the Regulations. In the event of a discrepancy between the O&M and the Permit or Regulations, the requirements of the Permit and the Regulations would govern.

k. Emergency Repairs

Emergency repairs or the replacement of critical "like kind" components of the wastewater treatment facility necessary for the continued operation of the facility may be performed without first obtaining a construction permit from the Department.

A report must be submitted to the Department within five (5) days of completion of the emergency repairs. The report must summarize the nature of the emergency and the repairs performed. All violations must also be reported in accordance with Section 6.5.9.

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